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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/998,432

11/29/2001

Charles Robert Granitz

13DV14003

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7590

01/20/2006

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EXAMINER

HARRISON, MONICA D

ART UNIT

PAPER NUMBER

2813

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/998,432

Applicant(s)

GRANITZ ET AL.

Examiner

Monica D. Harrison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 20-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 20-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Applicant's amendment filed 9/1/05 has been entered.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 23-28, and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hause (3,033,335).

2. Regarding claim 1, Hause discloses a method of operating a gas turbine engine having a lubrication sump which vents air through a vent which produces an exit pressure at the exit of the vent, comprising: a) running the engine at idle; and b) reducing said exit pressure (column 10, lines 43-75 thru column 11, lines 1-46).

3. Regarding claim 2, Hause discloses wherein the reducing of paragraph (b) comprises ducting a compressor discharge bleed to an eductor connected to the vent, to thereby draw air through the vent (column 11, lines 1-19).

4. Regarding claim 3, Hause discloses comprising: c) terminating the reducing of paragraph (b) when flow through the vent exceeds a floor (column 11, lines 17-19).

5. Regarding claim 4, Hause discloses comprising: c) raising speed of the engine; and d) terminating the reducing of paragraph (b) (column 10, lines 73-75 thru column 11, lines 1-46).

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6. Regarding claim 23, Hause discloses comprising: (c) terminating the reducing of said pressure during cruise operation (column 10, lines 43-75 thru column 11, lines 1-46).

7. Regarding claim 24, Hause discloses comprising: d) during cruise operation, using a flow restrictor to reduce flow through the vent below that which would occur in the absence of the flow restrictor (Figure 10, reference 442).

8. Regarding claim 25, Hause discloses comprising maintaining an eductor in fluid communication with said vent (Figure 10, reference 174-320); and d) using the eductor to maintain fluid flow through the vent above a predetermined minimum, said fluid flow being accompanied by said reducing of pressure (column 10, lines 37-64).

9. Regarding claim 26, Hause discloses wherein the operation of paragraph (b) occurs at idle speeds (column 10, lines 37-75 thru column 11, lines 1-46).

10. Regarding claim 27, Hause discloses wherein the operation of paragraph (b) terminated at cruise speeds (column 8, lines 59-75 thru column 9, lines 1-13).

11. Regarding claim 28, Hause discloses further comprising: (c) at cruise speeds, restricting flow through said vent Figure 10, reference 442).

12. Regarding claim 31, Hause discloses wherein the reducing accompanies the running (column 10, lines 43-75 thru column 11, lines 1-46).

13. Regarding claim 32, Hause discloses wherein the terminating accompanies the raising (column 10, lines 73-75 thru column 11, lines 1-19).

14. Regarding claim 33, Hause discloses wherein the sump is gravity fed (Figure 10, reference 430).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: \*

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-22, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hause (3,033,335) in view of Schulze et al (3,053,268).

15. Hause discloses all above claimed subject matter except the mixing throat (claim 20) further maintaining a flow restrictor downstream of the sump vent; and maintaining the eductor in a de-actuated state at cruise speed (claim 21), wherein the flow restrictor is within the mixing throat (claim 22 and 29), and wherein the flow restrictor reduces flow through the vent below that which would occur in the absence of the flow restrictor (claim 30).

Schulze et al discloses the mixing throat (Figure 18, reference 157) further maintaining a flow restrictor downstream of the sump vent; and maintaining the eductor in a de-actuated state at cruise speed (column 10, lines 15-27)), wherein the flow restrictor is within the mixing throat (column 10, lines 17-19; Figure 18, reference 156), and wherein the flow restrictor reduces flow through the vent below that which would occur in the absence of the flow restrictor (column 10, lines 18-19).

It is obvious, at the time the invention was made, for one having ordinary skill in the art, to modify Hause with the teachings of Schulze et al for the purpose of using an eductor assembly in order to readily move engine fluids that are regulated by pressure in and out of the engine.

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*Response to Arguments*

16. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica D. Harrison whose telephone number is 571-272-1959. The examiner can normally be reached on M-F 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr. can be reached on 571-272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monica D. Harrison  
AU 2813

mdh  
January 13, 2006

  
CARL WHITEHEAD, JR.  
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